

WHAT IS CLAIMED IS:

1. A recording method for performing recording on a recording medium by applying on the recording medium a reaction liquid containing a
5 polyvalent metal salt and then applying thereon a pigment ink, the method comprising the steps of:

applying the pigment ink having a lower surface tension than that of the reaction liquid to the reaction liquid applied on the top surface of the
10 recording medium; and

forming a filmy agglomerate compose of collective aggregates at the interface between the reaction liquid and the pigment ink in contact with each other.

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2. A recording method for performing recording on a recording medium using a pigment ink and a reaction liquid that has a higher surface tension than that of the pigment ink and contains a
20 polyvalent metal salt capable of agglomerating the pigment ink, the method comprising the steps of:

applying the reaction liquid on the recording medium; and

applying the reaction liquid on the recording
25 medium so that the pigment ink is brought into contact with the reaction liquid that is present as liquid on the top surface of the recording medium.

3. A recording method for performing recording on a recording medium by applying on the recording medium a reaction liquid containing a polyvalent metal salt and a surfactant and then
5 applying thereon a pigment ink containing the surfactant at a content ratio higher than that in the reaction liquid, the method comprising the steps of:

bringing the pigment ink into contact with the
10 surface of the reaction liquid that is present on the top surface of the recording medium; and

forming a filmy agglomerate composed of collective aggregates at the interface between the reaction liquid and the pigment ink in contact with
15 each other.

4. A recording method for performing recording on a recording medium by applying a reaction liquid on the recording medium in advance
20 and then applying a pigment ink thereon, the method comprising the steps of:

bringing the reaction liquid into contact with the pigment ink on the top surface of the recording medium;

25 forming a filmy agglomerate composed of collective aggregates at the interface between the reaction liquid and the pigment ink in contact with

each other; and

accelerating the penetration of the reaction liquid into the recording medium.

- 5 5. A recording method for forming an image on a recording medium by applying on the recording medium a reaction liquid containing a polyvalent metal salt and then applying thereon a pigment ink having a lower surface tension than that of the
- 10 reaction liquid, the method comprising the steps of:
- bringing the reaction liquid into contact with the pigment ink on the top surface of the recording medium; and
- forming a firmly agglomerate composed of
- 15 collective aggregates at the interface between the reaction liquid and the pigment ink in contact with each other,
- wherein the solvent components of the ink and the reaction liquid are allowed to penetrate to form
- 20 the agglomerate film that covers a plurality of fibers constituting the recording medium in such a manner as to cross over the plurality of fibers.

6. A recorded product having an image formed
- 25 on a recording medium consisting of a large number of fibers, wherein the image includes an agglomerate film that covers a plurality of fibers constituting

the recording medium so as to cross over the plurality of fibers.

7. A recorded product having an agglomerate
5 film formed on a recording medium consisting of a large number of fibers, wherein the agglomerate film covers a plurality of fibers so as to cross over the plurality of fibers.

10 8. A recorded product having an agglomerate film formed on a recording medium consisting of a large number of fibers, wherein the agglomerate film covers irregularities of a plurality of fibers so as to cross over the irregularities.

15 Advantages of the Invention